C506
Czapek-Dox Agar

Properties

Form:	Powder
Appearance:	Off-White to Tan
Application:	Microbiology
Solubility:	Partially Soluble in Water
Typical Working Concentration:	50.01 g/L
Storage Temp:	2-6 ºC
Storage Temp of Stock Solution:	Stock solutions not recommended as precipitates may form.

Formula (mg/L)

Agar	15000	Potassium Phosphate, Dibasic, Anhydrous	1000
Ferrous Sulfate	10	Sodium Nitrate	3000
Magnesium Sulfate, Anhydrous	500	Sucrose	30000
Potassium Chloride	500		

Application Notes

Czapek-Dox medium is a semi-synthetic medium used for the cultivation of fungi. This medium is prepared according to the formula developed by Thom and Church. Czapek-Dox Medium is the modification of the original medium of Czapek-Dox as per Thom and Raper (1945)

Sucrose serves as the only source of carbon while sodium nitrate serves as the sole source of nitrogen. Dipotassium phosphate buffers the medium. Magnesium sulphate, potassium chloride, and ferrous sulphate are included as essential ions necessary for growth.

References

Brooks F. T. and Handsford C. G. (1922) Trans. Brit. Mycol. Soc. 8. 113-142.
Czapek F, Beitr. (1902) Chem. Physiol. & Pathol. 1, 540.
Dawson CO. (1962) Saboutaudia 1. 214-219.
Dox AW, (1910) U.S. Dep. Agr., Bur. Anim. Ind. Bull. 120, 170.
Raper K. B. and Thom C. (1949) “Manual of the Penicillia” Williams and Wilkins Co. Baltimore.
Smith G. (1960) An Introduction to Industrial Mycoloogy 5th ed., Edward Arnold Ltd., London.
Thom C. (1930) “The Aspergilli.” Williams and Wilkins Co. Baltimore.
Thom and Raper (1945) Manual of Aspergilli, 39.
Thom C. & Church B. (1926) The Aspergillli. Baltimore: The Williams and Wilkins Co.
Wakesman S. A. (1931) “Principals of soil Microbiology” Bailliere Tindall and Cox, London.

*Phyto*Technology Laboratories®
P.O. Box 12205; Shawnee Mission, KS 66282-2205
Phone: 1-888-749-8682 or 1-913-341-5343; Fax: 1-888-449-8682 or 1-913-341-5442
Web Site: www.phytotechlab.com